AIR SYSTEMS

ACTIVA Rooftop

ARC-ARG-ARH-ARD 45 to 90 AB

Johnson Controls

ACTIVA Rooftop

ARC-ARG-ARH-ARD

A complete range from 45.1 kW up to 84 kW

YKN2open

Features

- High efficiency EER and COP
- Low noise level
- All configurations: Cooling only, Cooling + gas, Heating, Heating + Gas
- New board with BMS connection (N2open protocole as standard)
- Energy recovery (enthalpy wheel)
- EC Return fan
- External HP & LP access
- Filters G4, F6 & F7 available
- Tandem configuration (up to 52°C outdoor temperature)

Nomenclature

A R C 045 A B

- B = Blue fin
  C = Copper fin (ask JCI)
- A = version
- **Capacity range:**
  045 = 45 kW
- **Product category:**
  C = Cooling
  H = Heat pump
  G = Cooling & Gas
  D = Heat pump & Gas (Dual)
- Rooftop
- Activa series

YORK
BY JOHNSON CONTROLS

ACTIVA Rooftop

ARC-ARG-ARH-ARD 045 to 090 AB

Technical features

Cooling only models		**ARC 045 AB**	**ARC 060 AB**	**ARC 075 AB**	**ARC 090 AB**
Net cooling capacities	kW	45.1	61.0	71.5	84.0
Power input	kW	16.0	23.0	30.0	36.0
EER		2.96	2.91	2.67	2.60
Working range (full load / partial load)	°C	7°C ~ 46°C / -10°C ~ 52°C			
Heat pump models		**ARH 045 AB**	**ARH 060 AB**	**ARH 075 AB**	**ARH 090 AB**
Net cooling capacities	kW	47.6	61.9	71.4	83.4
Power input in cooling	kW	17.0	20.0	28.0	36.0
EER		3.00	3.06	2.67	2.60
Heating capacities (1)	kW	45.2	58.0	71.7	86.5
Power input in heating	kW	16.0	19.0	27.0	33.0
COP		2.80	2.96	2.81	2.60
Working range (full load / partial load)	°C	-10°C ~ 46°C / -10°C ~ 52°C			
Cooling only + Gas heating models		**ARG 045 AB**	**ARG 060 AB**	**ARG 075 AB**	**ARG 090 AB**
Net cooling capacities	kW	45.1	61.0	71.5	84.0
Cooling power input	kW	16.0	23.0	30.0	36.0
Standard Heating capacities (1)	kW	76.0	76.0	76.0	76.0
Natural gas 2ND-H, G20	m^3/h	8.60	8.60	8.60	8.60
High Heating capacities (1)	kW	90.0	90.0	90.0	90.0
Natural gas 2ND-H, G20	m^3/h	9.80	9.80	9.80	9.80
Working range (full load / partial load)	°C	-15°C ~ 46°C / -15°C ~ 52°C			
Heat pump + Gas heating models		**ARD 045 AB**	**ARD 060 AB**	**ARD 075 AB**	**ARD 090 AB**
Net cooling capacities	kW	47.6	61.9	71.4	83.4
Cooling power input	kW	17.0	20.0	28.0	36.0
Heating capacities (1)	kW	45.2	58.0	71.7	86.5
Power input in heating	kW	16.0	19.0	27.0	33.0
Standard Heating capacities (1)	kW	76.0	76.0	76.0	76.0
Natural gas 2ND-H, G20	m^3/h	8.60	8.60	8.60	8.60
High Heating capacities (1)	kW	90.0	90.0	90.0	90.0
Natural gas 2ND-H, G20	m^3/h	9.80	9.80	9.80	9.80
Working range (full load / partial load)	°C	-15°C ~ 46°C / -15°C ~ 52°C			
Common characteristics					
Power supply		400V/3 + N/ 50Hz			
Main switch	A	50	63	80	80
Main cable	Nbr. x mm^2	5 x 10	5 x 16	5 x 25	5 x 25
Cable to thermostat	Nbr. x mm^2	10 x 0,22			
Number of circuits / Compressor type		2 x scroll			
Evaporator fan at nominal airflow — Airflow	m^3/h	8 500	11 500	13 500	16 000
Evaporator fan at nominal airflow — Power input	kW	3	4	5,5	7,5
Nett dimensions — Height	mm	1 316	1 316	1 367	1 367
Nett dimensions — Length	mm	3 180	3 180	3 495	3 495
Nett dimensions — Depth	mm	2 337	2 337	2 337	2 337
Nett weight ARC / ARG	kg	900 / 1 010	945 / 1 055	1 118 / 1 228	1 142 / 1 252
Nett weight ARH / ARD	kg	930 / 1 040	985 / 1 095	1 145 / 1 255	1 220 / 1 330

All the data are at EUROVENT conditions with 400V/3+N/50Hz.
Cooling : Entering indoor coil temp. 27°C / 19°C WB and outdoor temperature 35°C - Heating : Entering indoor coil temp. 20°C and outdoor temperature 7°C / 6°C WB
(1) Add indoor fan motor consumption to know total heating capacity.

Codes

Cooling only models	**ARC 045 AB**	**ARC 060 AB**	**ARC 075 AB**	**ARC 090 AB**
	S661752140	S661752160	S661752170	S661752190
Heat pump models	**ARH 045 AB**	**ARH 060 AB**	**ARH 075 AB**	**ARH 090 AB**
	S661752143	S661752163	S661752173	S661752193
Cooling only + Gas heating models	**ARG 045 AB**	**ARG 060 AB**	**ARG 075 AB**	**ARG 090 AB**
	S661752141	S661752161	S661752171	S661752191
Heat pump + Gas heating models	**ARD 045 AB**	**ARD 060 AB**	**ARD 075 AB**	**ARD 090 AB**
	S661752142	S661752162	S661752172	S661752192
Thermostat				
to be ordered separately	DPC-1			

Manufacturer reserves the rights to change specifications without prior notice.

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Activa rooftop details & features

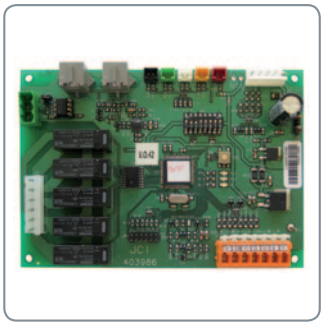
Condenser fan

New condenser fans with high technology blades and outdoor bell that reduce the turbulences in the air and therefore increase the efficiency and improve the noise level performance.

PCB board

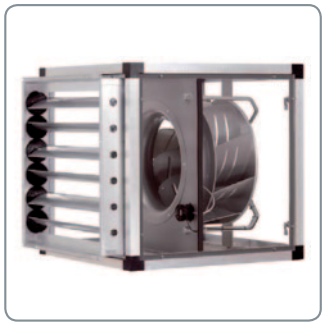
Tandem scroll compressors

Tandem compressors configuration allows the unit to operate at partial load (only with one compressor) with higher efficiency and increases the working range up to +52°C ambient temperature.



PCB board

The new control board keeps same features and benefits as YKlon V3 (see pg. 127) and adds new logical to control the tandem circuit, the new options (heat recovery, return fan) and the possibility to communicate with BMS system as standard (N2Open).

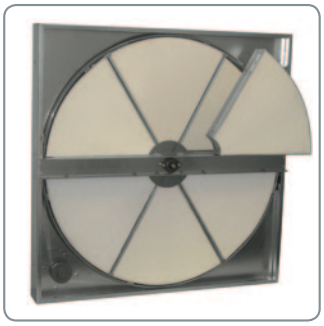


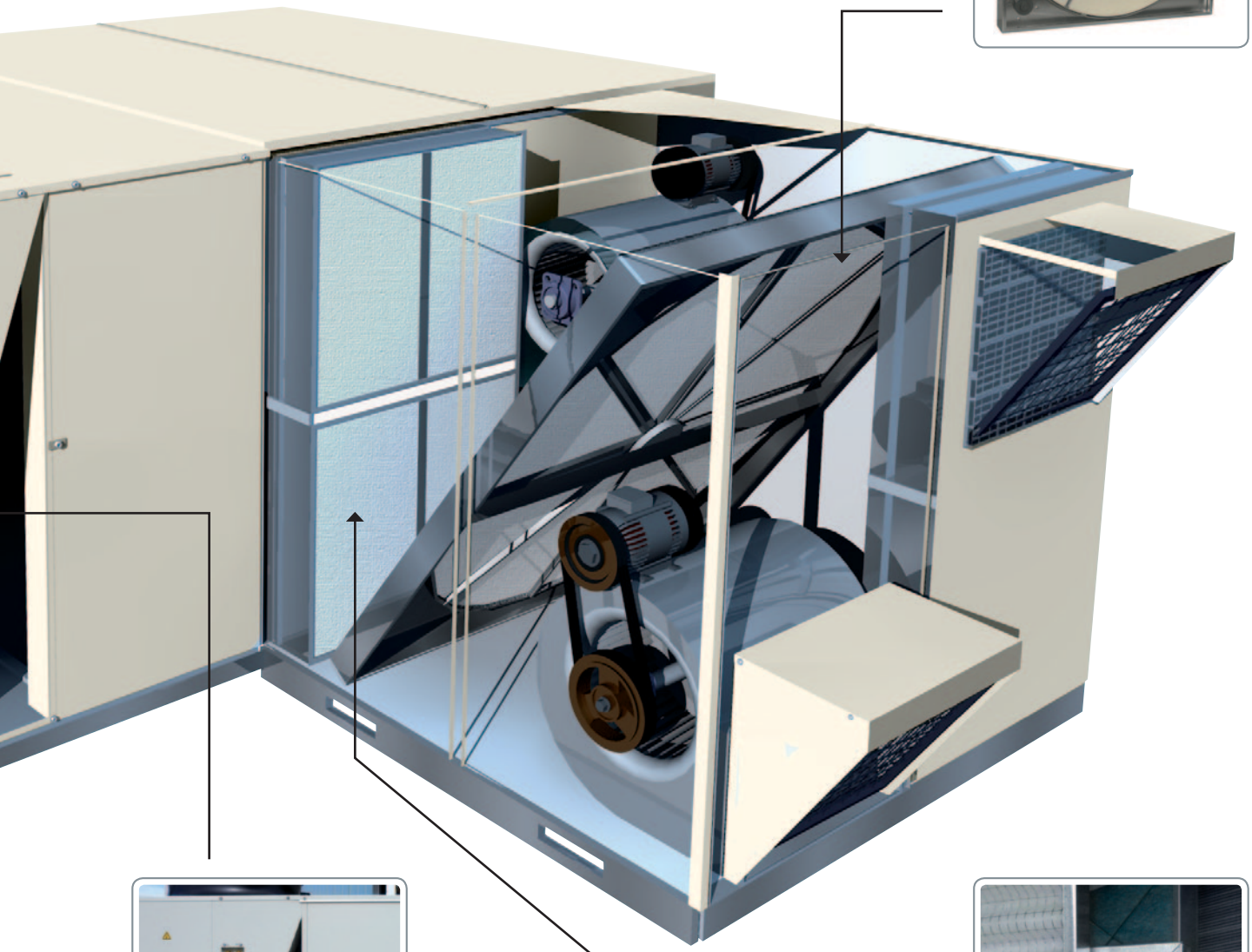
Return fan

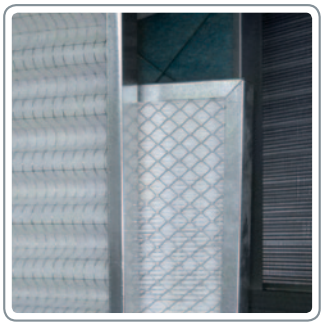
Located in a special roof curb underneath the rooftop, it works simultaneously with the indoor fan in order to balance the amount of air supplied to and removed from the space. It is the best suited for systems with high return path static pressures.
Also, incorporates EC technology and a differential pressure gauge to easy set up and maintain automatically the working point in the installation.

Energy recovery system

It is the preferred solution to solve two conflicting requirements: reduce running costs (increase efficiency) while maintaining the indoor air quality at high levels (through ventilation).
An enthalpy rotary wheel retains the energy from the exhaust air and transmits it to the fresh air stream that is being supplied in the conditioned space.
The material used is manufactured with the latest technology to increase the energy transmission in both sensible and latent heat.
The wheel is split into 6 portions that can be easily removed for cleaning.







V-Coils

Made in blue fin (or in copper for harsh conditions under special request), increases the heat exchange surface for a given rooftop footprint. The floor pan is sloped for easy condensates drainage.

Filter options

Washable air filters: G4 class filter (gravimetric efficiency above 90%) and M1 fire class, it comes with galvanized sheet metal frame that allows easy cleaning and replacement. Delivered as standard.
Filter kit F6: for Average Opacimetric efficiency (em) 60% ≤ em ≤ 80%
Filter kit F7: for Average Opacimetric efficiency (em) 80% ≤ em ≤ 90%
As per EN 779

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Accessories & options

Accessories & options

		Code	Cooling only				Heat pump			
			45	60	75	90	45	60	75	90
Thermostat DPC-1		S603786044	A	A	A	A	A	A	A	A
Dry bulb triple input economizer or motorized air damper with rain hood		S661752301	O	O			O	O		
		S661752311			O	O			O	O
Enthalpy probes		S613990081	O	O	O	O	O	O	O	O
Indoor air quality sensor		S606819964	A	A	A	A	A	A	A	A
Power Exhaust		S661752302	A	A			A	A		
		S661752322			A	A			A	A
Barometric relief damper and rain hood		S613990472	A	A			A	A		
		S613990473			A	A			A	A
Fresh air damper and rain hood (2)		S661752303	A	A			A	A		
		S661752323			A	A			A	A
High speed drive	4 kW	S611990401	O				O			
	5.5 kW	S611990601		O				O		
	7.5 kW	S611990701			O				O	
	9.2 kW	S611990901				O				O
	11 kW	S611990902				O				O
Soft start indoor fan	5.5 kW	S606744690	O	O	O	O	O	O	O	O
	11.5 kW	S606744691	O	O	O	O	O	O	O	O
Low ambient kit		S613118301	O	O	O	O	O	O	O	O
Side duct flanges		S613991482	A	A			A	A		
		S613991483			A	A			A	A
Fixed roof curb		S613991884	A	A			A	A		
		S613991885			A	A			A	A
Adjustable roof curb		S613992081	A	A			A	A		
		S613992082			A	A			A	A
Dirty filter switch		S613990085	O	O	O	O	O	O	O	O
Smoke detector		S613995382	O	O	O	O	O	O	O	O
Fire detection thermostat		S613903003	O	O	O	O	O	O	O	O
Hot water coil		S611083351	O	O	O	O	O	O	O	O
Electric heaters	12 kW	S611761584	O	O	O	O	O	O	O	O
	25 kW	S611762284	O	O	O	O	O	O	O	O
	37 kW	S611763385	O	O	O	O	O	O	O	O
	50 kW	S611764485	O	O	O	O	O	O	O	O
Propane conversion Kit		S611801780	A	A	A	A	A	A	A	A
High heat gas conversion kit		S611803080	O	O	O	O	O	O	O	O
Filter kit F6		S611300401	O	O			O	O		
		S611300701			O				O	
		S611300901				O				O
Filter kit F7		S611300402	O	O			O	O		
		S611300702			O				O	
		S611300902				O				O
Grill condenser coil protection		S661752304	O				O			
		S661752324		O				O		
		S661752314			O	O			O	O
Antivibration mounting kit		S613990411	A	A	A	A	A	A	A	A
Return fan bottom duct		S613993042	A	A			A	A		
		S613993072			A	A			A	A
Energy recovery	Q6000 (1)	S611994501	A	A			A	A		
	Q3000 (1)	S611994502	A	A			A	A		
	Q9000 (1)	S611997501			A	A			A	A
	Q4500 (1)	S611997502			A	A			A	A
Filter kit F6 for energy recovery		S611994506	O/A	O/A			O/A	O/A		
		S611997506			O/A	O/A			O/A	O/A
Filter kit F7 for energy recovery		S611994507	O/A	O/A			O/A	O/A		
		S611997507			O/A	O/A			O/A	O/A
Alarm relay board		S606791243	O/A	O/A	O/A	O/A	O/A	O/A	O/A	O/A
Copper-copper coil		Contact us	O	O	O	O	O	O	O	O

O=Option (factory fitted). A=Accessory (supplied loose). O/A=If you want this item factory fitted, precise it in the order form.
(1) = Energy recovery accessory include: economizer, rain hood, indoor air quality sensor, enthalpy probe and G4 filters.
(2) Fresh air damper can not be installed if economizer or motorized damper is fitted

Accessories & options

		Code	Cooling + gas heating				Heat pump + gas heating			
			45	60	75	90	45	60	75	90
Thermostat DPC-1		S603786044	A	A	A	A	A	A	A	A
Dry bulb triple input economizer or motorized air damper with rain hood		S661752301	O	O			O	O		
		S661752311			O	O			O	O
Enthalpy probes		S613990081	O	O	O	O	O	O	O	O
Indoor air quality sensor		S606819964	A	A	A	A	A	A	A	A
Power Exhaust		S661752302	A	A			A	A		
		S661752322			A	A			A	A
Barometric relief damper and rain hood		S613990472	A	A			A	A		
		S613990473			A	A			A	A
Fresh air damper and rain hood (2)		S661752303	A	A			A	A		
		S661752323			A	A			A	A
High speed drive	4 kW	S611990401	O				O			
	5.5 kW	S611990601		O				O		
	7.5 kW	S611990701			O				O	
	9.2 kW	S611990901				O				O
	11 kW	S611990902				O				O
Soft start indoor fan	5.5 kW	S606744690	O	O	O	O	O	O	O	O
	11.5 kW	S606744691	O	O	O	O	O	O	O	O
Low ambient kit		S613118301	O	O	O	O	O	O	O	O
Side duct flanges		S613991482	A	A			A	A		
		S613991483			A	A			A	A
Fixed roof curb		S613991884	A	A			A	A		
		S613991885			A	A			A	A
Adjustable roof curb		S613992081	A	A			A	A		
		S613992082			A	A			A	A
Dirty filter switch		S613990085	O	O	O	O	O	O	O	O
Smoke detector		S613995382	O	O	O	O	O	O	O	O
Fire detection thermostat		S613903003	O	O	O	O	O	O	O	O
Hot water coil		S611083351								
Electric heaters	12 kW	S611761584								
	25 kW	S611762284								
	37 kW	S611763385								
	50 kW	S611764485								
Propane conversion Kit		S611801780	A	A	A	A	A	A	A	A
High heat gas conversion kit		S611803080	O	O	O	O	O	O	O	O
Filter kit F6		S611300401	O	O			O	O		
		S611300701			O				O	
		S611300901				O				O
Filter kit F7		S611300402	O	O			O	O		
		S611300702			O				O	
		S611300902				O				O
Grill condenser coil protection		S661752304	O				O			
		S661752324		O				O		
		S661752314			O	O			O	O
Antivibration mounting kit		S613990411	A	A	A	A	A	A	A	A
Return fan bottom duct		S613993042	A	A			A	A		
		S613993072			A	A			A	A
Energy recovery	Q6000 (1)	S611994501	A	A			A	A		
	Q3000 (1)	S611994502	A	A			A	A		
	Q9000 (1)	S611997501			A	A			A	A
	Q4500 (1)	S611997502			A	A			A	A
Filter kit F6 for energy recovery		S611994506	O/A	O/A			O/A	O/A		
		S611997506			O/A	O/A			O/A	O/A
Filter kit F7 for energy recovery		S611994507	O/A	O/A			O/A	O/A		
		S611997507			O/A	O/A			O/A	O/A
Alarm relay board		S606791243	O/A	O/A	O/A	O/A	O/A	O/A	O/A	O/A
Copper-copper coil		Contact us	O	O	O	O	O	O	O	O

O=Option (factory fitted). A=Accessory (supplied loose). O/A=If you want this item factory fitted, precise it in the order form.
(1) = Energy recovery accessory include: economizer, rain hood, indoor air quality sensor, enthalpy probe and G4 filters.
(2) Fresh air damper can not be installed if economizer or motorized damper is fitted

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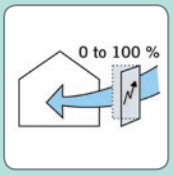
Accessories & options

Triple input economizer

This system utilizes 3 probes: Return Air, Outdoor Air and Supply Air. The Outdoor Air damper and the Return Air dampers are mechanically interconnected in order to provide the same airflow at the coil inlet, with a single damper motor. The PCB compares sensor values and modulates the dampers providing maximum efficiency of the economiser system (free cooling) and comfort (Supply Air > 12°C). Combined with the air quality sensor, your payback will be ensured within few months. The rain hood is painted to match the basic unit and aluminium mesh pre-filter prevents water penetration.

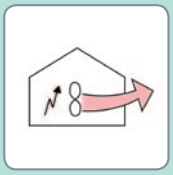
Indoor air quality

This sensor measures concentrations of pollutant gases, such as tobacco smoke, human body odours, kitchen odours, carbon monoxide, etc... It automatically overrides the economizer when pollutant levels rise above preset limits. A shorting plug will set the algorithm to acceptable, good or very good air quality. This VOC sensor (Volatile Organic Compounds) sends an ON/OFF signal to the control PCB. The YKIon will then adjust the fresh air damper, optimising indoor air quality and minimising the energy consumption.



Motorised outdoor air damper

Equipped with the same dampers as the economizer, the Return Air probe is not used. Outdoor air damper opens to pre-set position whenever the indoor fan is operating (selected from the thermostat, the indoor fan can be activated with the compressor or to operate continuously) and will drive fully closed when the indoor fan shuts down. The rain hood is painted to match the basic unit and aluminium mesh pre-filter prevents water penetration.



Power Exhaust

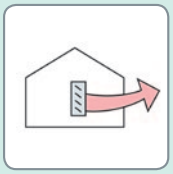
Used to mechanically relieve internal air pressure from the Return Air section and ensure efficient fresh air introduction on units equipped with triple input economiser or motorised air damper. The power exhaust fan motor works when enough Outdoor Air is blowing into the room and if Outdoor Air temperature is acceptable (12°C < t° < 30°C).

Enthalpy sensors

To control the economizer in humid areas, or when indoor air humidity needs to remains dry, you should select enthalpy regulation. Enthalpy sensors will be used with the triple input economizer.

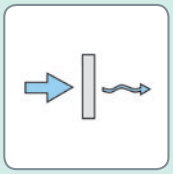
High speed drive

The high speed drive will increase the supply fan performance for applications requiring greater air flow and/or static pressure.
Please consult technical guide for more information.



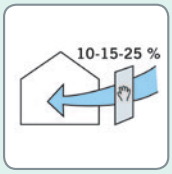
Barometric relief damper

This accessory can be used to relieve internal air pressure on units equipped with triple input economiser or motorised air damper but no power exhaust. When the rooftop is working in free cooling or introducing fresh air, the damper opens to relieve over pressure from the return air section. This accessory is comprised of a rain hood, a protective grille and a fully assembled damper.



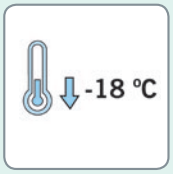
Dirty filter switch

Ensures that clean air is being supplied, advises when maintenance is required to prevent excessive depression and ensures water integrity of the AHU. These are the main advantages of filter dirty switch. Connected with the DPC-1 thermostat, the filter icon will appear on the thermostat screen when a filter change is required.



Fresh air damper and rain hood

The most cost effective method with a complete rain hood and a fixed damper that can be adjusted to provide approximately 10, 15 or 25% of fresh air.



Low ambient control

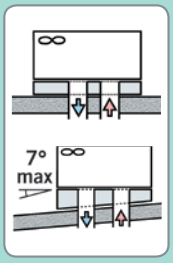
All our rooftops are designed to work in cooling mode down to 7°C ambient temperatures. Although this working range suits most applications, the units can operate correctly down to -18°C with optional low ambient control.

Fire detection thermostat

This fire detection thermostat is protecting the AHU but must not be used to ensure a full building protection against fire danger. The standard AHU is protected as standard with a Supply Air probe that shuts the unit down (lockout) when temperature exceeds 80°C. The electro-mechanical fire detection thermostat is used to fulfil specific local requirement. A manual reset is necessary.

Smoke detector

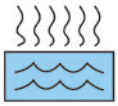
The smoke detector is protecting the AHU but must not be used to ensure a full building protection against smoke danger. If smoke is detected the AHU is shutdown (lockout). A manual reset is necessary.



Fixed and adjustable roof curbs

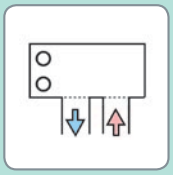
Ideal for down-flow applications, it is a great help for installation allowing duct connections, electrical connection and weatherproofing between the roofcurb and the roof of the building. Shipped in kit form, it also gives sufficient height for condensate trap operation.

The adjustable roof curbs have the same benefits as the fixed roof curb, it allows the rooftop to be levelled on a roof with up to 7° slope (4%).



Hot water coil with control

The hot water coil and his control are always fitted, wired and factory tested. Located in the supply air section, side or bottom duct connection is possible without any modification. Complete with an anti-frost thermostat, the PCB will activate the modulated valve (24V supply, 0 – 10V modulating signal) in order to get the best comfort. A jumper will allow using hot water coil as 1st heating stage.



Side duct flanges

Fitted as standard on units 90, 120 and 150, this accessory is composed of easy to install sheet metal panels to allow ductwork connections on the side of the AHU for horizontal return air and/or supply air.

Electric heaters

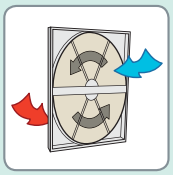
Available on cooling only and Heat pump units, the electric heater is protected with two overheats per element.
When the overheat operates, there is a lock out of the faulty electric heater stage and the PCB starts automatically another heat stage.

Kit conversion propane

This kit comprises replacement burner, pilot injectors and all necessary instructions for converting the natural gas burner to propane gas. The nominal pressure of the propane gas should be 37 mbar.

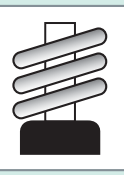
High heat gas

This kit comprises replacement burner injectors and all necessary instructions to provide high heat capacity for gas rooftop.



Energy recovery

Attached to the return air box of the rooftop, a rotary enthalpy wheel retrieves the energy of the exhausted air and transmits it to the fresh air intake. A special material used in the wheel allows that latent heat as well as sensible heat are transmitted.



Antivibration mounting kit

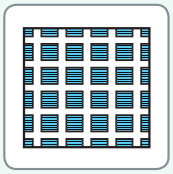
It is composed by a set of stainless steel springs, to be assembled underneath the rooftop in a specific position. Their installation avoids the potential vibration transmission of the equipment to the building and reduces therefore the noise level (compressors have their own shock absorbers delivered as standard).

Indoor fan soft start

Compact control unit with a motor with AC semiconductors, designed for soft starting and stopping of three-phase motors for centrifugal fans. The starting time, the stopping time and the initial torque are adjusted by mean of independent potentiometers.

Return fan

Used to overcome high return path pressure drops, works in series with the indoor fan to maintain the air pressure of the conditioned space within acceptable levels.



Grill condenser protection

Metallic frame painted with oven-baked polymerized paint (800h salt spray resistance) to protect the fins of the coils from external damages.

Air filters

G4, F6 and F7 filters are available to purify the air in the room. M1 fire class and manufactured in sheet metal frame, they are easy to install and clean.

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Design details

Cabinet features

- Build to last, all cabinet with heavy gauge galvanized steel and powder paint backed on oven.
- Copper-copper coils or blue fin delivered upon request.
- Side or bottom duct connections to be realized on site.
- Excellent water-tightness even with high internal negative pressure.
- External slopes to remove rain water.
- Only 4 solid points to crane.

Copper-copper coil

Blue fin

Designed to service

- Quick and easy access to all components.
- Doors equipped with hinges and ¼ turn lock.
- Service valves.
- Inspection window for sight glass.
- Internal drain pan slope to remove drain water.
- YKtool for comissioning, monitoring and controlling unit parameters.

Electrical features

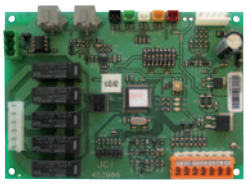
- YKN2open regulation and control.
- Vertical hermetic scroll compressor, with compressor module and crankcase heater.
- Smooth start indoor fan.
- Phase detector.
- Main power switch.
- Numbered wires in cable truncking.
- Motor protection.

Quality and ELT

Design, built and tested under ISO9001 quality system certification, we are constantly listening to customer comments. For this reason, our End of Line Test ELT strives to be as close as possible to the commissioning you carry out on site.

Control System

YKN2open



The YKlon is a controller regulating all components and accessories. It will pro actively manage cool and heat stages to maintain a stable room temperature maximizing the efficiency.
Additionally, the benefits are:

- Redundancy on cool and heat stages (if one step is locked out, the PCB starts another one automatically).
- Random start between units to minimise electrical tariff.
- All stages will start in sequence to reduce peak inrush.
- Reduces nuisance calls by using 3 times "you are out" on all safeties before a hard lockout occurs.
- Automatic restart after power failure. Compressors run time priority.
- Alarm output relay and led diagnostic code. No parameters to check before starting.
- Lockout and incident level of protection. Last 10 lockouts stored in a non-volatile memory.
- 4 heating stages on hot water heating.
- BMS connection (N2 Open protocol).

YKtool N2open

The Yktool is the perfect tool to use on a regular basis for comissioning and service on site. For comissioning, it will override the thermostat and start the cooling or heating stages. Being a plug and play device, you will have direct acess to all sensors and status of each components and accessories installed (lockout & incidents, temperatures, defrost test...).

Code: S613786031

Features and benefits Thermostat DPC-1

- Day (normal), night (economy) and unoccupied (stand by).
- Lockout code on screen gives direct diagnostics.
- ON/OFF or programmable from dip switch setting.
- Day or night programmable state avoids wide internal temperature variation.
- 3 preset and 3 programmable profiles.
- Temperature override.
- Select the control sensor you want to use (integrated in the thermostat, return air in duct or room sensor).
- Turbo, normal or economy logic from dip switch setting.
- From −3°C to +3°C sensor offset.
- Average temperature with room or duct sensors.

Thermostats with integrated sensors

Thermostat models		DPC-1	DPC-1R	
	Code	S603786044	S603786045	
Roomtop	RTC and RTH	X	0	
Rooftop	All models	X (1)	0	
Split system	VAC and VAH	X	0	
	VCH	X	0	

Main features			
Strategy	Turbo, normal or economy		
Auto restart after power failure	●	●	
Number of cool stages	2	1	2
Number of heat stages	2	1	2
Auxiliary Heat	●	●	
Automatic Heat/Cool change over	●	●	
Continuous or auto indoor fan	●	●	
Manual setback (Day/Night key)	Day, night and unocuppied		
Override possibility	●	●	
Compressor anti short cycle	●	●	
°C Range cooling / heating	10 to 32°C / 9 to 32°C		
Programmable, 7-day	●	●	
Lockout codes	●	●	
Outdoor air temperature	●	with YKlon	
Sensor selection	●	●	

X : Delivered as standard with the unit. *X (1) : Standard but has to be ordered separately.*
O : Optional. *● : Function available.*

DS-1

AS-1

RS-1

Duct sensor	Ambiance sensor*	Room sensor
DS-1	AS-1	RS-1
S603786047	S603786049	S603786042

** To control up to 4 temperature sensors. To be fitted with DPC-1 version 2.0 or superior.*

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